

AMENDED CLAIMS

[received by the International Office on June 20, 2005
(20.06.2005): original Claims 1-12 replaced by new
5 Claims 1-15]

1. Aiming device (100) for drilling a hole in that region of a bone (300) which is in the vicinity of a joint, consisting of a U-shaped bow (110) having at least one contact element (120) at one end of the bow (110) and, at the other end of the bow (110) a screw spindle (130) movable towards the contact element (120) or in the opposite direction and having a rotary grip (132), for clamping the device (100) to the region in the vicinity of the joint, and a drill bush (140), characterized in that the drill bush (140) can be arranged at that end with the contact element (120) and can be removed, the bone compression produced by means of the bow (110) persisting after removal of the drill bush (140) for insertion of the bone screw.
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2. Aiming device (100) for drilling a hole in that region of a bone (300) which is in the vicinity of a joint, consisting of a U-shaped bow (110) having at least one contact element (120) at one end of the bow (110) and, at the other end of the bow (110) a screw spindle (130) movable towards the contact element (120) or in the opposite direction and having a rotary grip (132), for clamping the device (100) to the region in the vicinity of the joint, and a drill bush (140), characterized in
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that the drill bush (140) can be arranged on that end with the contact element (120) and can be removed so that, during use, the compression of the bone (300) which is produced by means of the screw spindle (130) persists after removal of the drill bush (140) for inserting the bone screw (510) between contact element (120) and target plate (200).

10 3. Device according to either of Claims 1 and 2, characterized in that the contact element is designed as a rotationally movable adaptor bush (120).

15 4. Device according to either of the preceding Claims, characterized in that the adaptor bush (120) can be caused to form a plug connection with a target plate (120) which can be screwed onto an implant (410).

20 5. Device according to any of the preceding Claims, characterized in that the drill bush (140) can be guided through the adaptor bush (120) and can be caused to engage the implant (410).

25 6. Device according to any of the preceding Claims, characterized in that a scale (133) for determining the length of a bone screw (510) to be inserted into the hole is mounted on the screw spindle (130) or on an element firmly connected to or engaging said screw spindle.

7. Device according to any of the preceding Claims, characterized in that that end of the screw spindle (130) which faces the contact element (120) has a rotationally movably mounted, preferably changeable, pin (131).

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8. Device according to any of the preceding Claims, characterized in that the rotary grip is in the form of a nut (132) mounted on the screw spindle (130).

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9. Device according to any of the preceding Claims, characterized in that the nut (132) is mounted in a recess of the bow (110).

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10. Device according to any of the preceding Claims, characterized in that the bow (110) is in the form of a lattice structure or has various cut-outs (112).

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11. Method for inserting angle-stable, long screws in the articular region of a bone, characterized in that, before the operation, a target plate is screwed to a lateral implant (bone plate), the target plate with the lateral implant is mounted on an adaptor bush of the aiming device by means of a plug connection, a drill bush is then inserted into an orifice in a cylindrical guide, and the drill bush, on passing through the adaptor bush and the target plate, comes into contact with a complementary internal thread in a bore of the implant, whereupon everything is placed together.

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on the fragmented bone and clamped by a screw
spindle of the aiming device and fixed through the
implant by means of a proximal bone screw, so that
the point of emergence of the distal, angle-stable
5 screws can be determined prior to drilling after
everything has been correctly aligned, drilling
can be effected through the integrated drill bush,
it being possible directly to determine the length
of the screw to be used and hence the depth of the
10 hole to be drilled, in particular on the basis of
a scale mounted on the screw spindle, and
thereafter the drill bush is removed and the
distal bone screw can be inserted while
maintaining the compression of the bone.

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12. Method for inserting angle-stable, long screws in
the articular region of a bone using an aiming
device (199) comprising a bow (110), comprising a
contact element (120) on one end of the bow and a
20 screw spindle (130) on the other end of the bow
(110) and a removable drill bush (140) in the
contact element (120), in particular according to
any of the preceding Claims, characterized in
that, when the bow (110) is positioned on the
25 bone, compression is produced by means of the
screw spindle (130) against the contact element, a
bone bore is then produced while maintaining
compression through the drill bush (140) and the
drill bush (140) is then removed, the compression
between screw spindle (130) and contact element
30 (120) persisting, after which a bone screw is
screwed into the bone while maintaining the

compression.

13. Method according to Claim 11, characterized in
that the bow (110) or the contact element (120) is
5 mounted after prior positioning of an implant, so
that the implant is kept pressed against the bone
by the compression, the implant then remaining
fixed on the bone by the bone screw.

- 10 14. Set, in particular for carrying out the method
according to Claims 10 to 12, characterized by a
U-shaped bow (110) having an adjustable screw
spindle (130), a target plate (200) which can be
connected thereto, a drill bush (140) and an
15 implant (410) which can be temporarily fixed to
the target plate (200) by means of the drill bush
(140).

15. Set, according to Claim 13, characterized in that
the temporary fixing of the target plate (200) to
the implant (410) is effected by means of the
drill bush (140) via a thread connection.
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